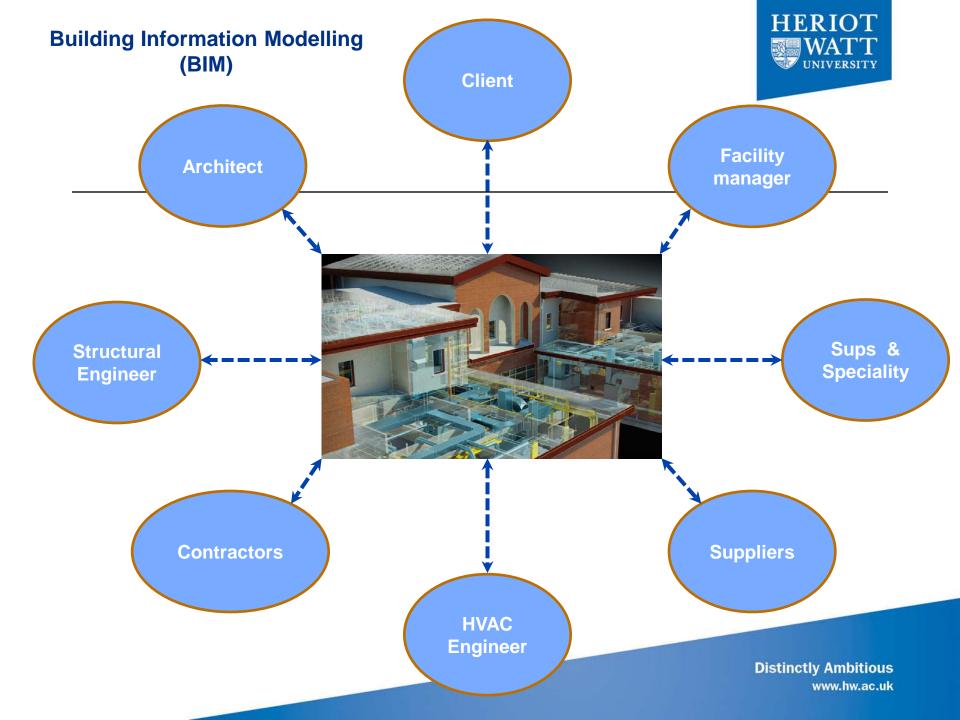# Online BIM Design Studio for project-based courses

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Background

- Higher Education should develop unified BIM curricula and efficient CPD courses for the people in the industry to meet the new requirements for professional accreditation.

  HEA STEM: BIM Education for AEC professionals workshop (2012)

- Built Environment graduates are now required to:
  - Gain knowledge of lean processes and how BIM technologies support this process, and
  - Develop skills to deliver better value through integrated design

Previous projects

Funded by **Enhancement Theme Fund:**

1. BIM-driven Curriculum for Built Environment
2. Collaborative learning via the cloud-based BIM technology

Aim and objective

- Aim: to investigate the delivery of project-based courses using BIM as an online design studio in order to enhance the IDLs engagement.

- Objectives:
    - To define the needs of the IDLs to collaborate on a defined project-based exercise.
    - To identify the supported IT requirements to achieve the learning outcomes
    - To run scenarios of collaboration between IDLs groups
    - To evaluate the achievement of the learning outcomes and the level of engagement
    - To identify the problems encountered when running the exercise
    - To set up a broader SBE strategy to implement collaboration among IDL groups.

The Challenges

IDLs commitment

The coordination of the work between IDLs groups.

The lack of students' skills in using the advanced BIM technology

Research Methodology

1. Reviewing the current practices
2. Identification of practical scenarios of collaborative learning
3. Reviewing the most suitable and compatible software and hardware
4. Designing online materials for IDLs
5. Setting up students groups and identification of the role of each group
6. Training students on using the BIM technology
7. Running the project-based scenarios among the students
8. Evaluation of the collaboration exercise and identifying the school strategy

Findings from what have been done so far (some feedback)

- *this project is a challenging and not knowing who the team members would be made it even more interesting to be a part of.*

- *I feel this is a right step for the university and the students involved.*